**REMARKS**

This application has been carefully reviewed in light of the Office Action dated June 11, 2003. By way of this amendment, claims 1 and 7 have been amended. Claims 1, 2 and 4-12 are currently pending in the application. Applicant hereby requests further examination and reconsideration in view of the following remarks.

The Examiner has rejected claims 1 and 7 under 35 U.S.C. § 102(b) as being anticipated by Andersen. This ground of rejection is respectfully traversed.

Independent claim 1 recites an airfoil having first and second walls, with the second wall having at least one rib extending therefrom. An outer wall comprising a high temperature foil is attached to the at least one rib in spaced apart relationship with the second wall. An interface layer is disposed between the at least one rib and the outer wall. Independent claim 7 recites an airfoil having a suction side tip wall and a pressure side tip wall. The pressure side tip wall defines a tip shelf and has at least one rib extending therefrom. An outer tip wall comprising a high temperature foil is attached to the at least one rib in spaced apart relationship with the pressure side tip wall. Claim 1 has been amended to recite that a first end of the outer wall is adjacent to the leading edge of the airfoil and a second end of the outer wall is adjacent to the airfoil trailing edge. Similarly, claim 7 has been amended to recite that a first end of the outer tip wall is adjacent to the leading edge and a second end of the outer tip wall is adjacent to the trailing edge. Support for these amendments is found in Figure 1 and paragraph [0014] of the present specification.

Andersen discloses an airfoil having a thin sheet metal sleeve 58 that completely surrounds the airfoil tip. The sleeve 58 is bonded to ribs 55 formed in the airfoil by brazing or welding. As such, Andersen fails to disclose an outer wall having a first end adjacent to the leading edge and a second end

adjacent to the trailing edge, as now required by claims 1 and 7. In addition, applicant respectfully submits that the metal sleeve 58 of Andersen is not a "high temperature foil" as that term is defined in the present specification. The Examiner states that the metal sleeve 58 is a high temperature foil because it is capable of withstanding high temperatures that occur in a gas turbine engine. The Examiner also points out that Patent Office policy is to give claims their broadest reasonable interpretation. However, MPEP §2111.01 states that interpreting claims as broadly as their terms reasonably allows means that "the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification" (emphasis added)(quoting *In re Zeltz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)). In the present case, applicant has provided a clear definition of the term "high temperature foil." Namely, paragraph [0014] states that use of the term "high temperature foil" means "a structure which is made from an alloy having improved strength and oxidation resistance over conventional superalloys at temperatures above 1093$^0$C (2000$^0$F), and capable of being formed to a thickness of about 0.51 mm (0.020 in.) or less." There is nothing in the Andersen patent to suggest that the metal sleeve 58 meets all of these characteristics, even assuming that it is capable of withstanding high temperatures.

For these reasons, it is respectfully submitted that Andersen does not disclose an outer wall that has a first end adjacent to the leading edge and a second end adjacent to the trailing edge or an outer wall that is made of a "high temperature foil" as that term is defined in the present specification. Accordingly, Andersen fails to anticipate claims 1 and 7.

The Examiner has rejected claims 2, 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Andersen in view of Chandley. This ground of rejection is respectfully traversed.

The Examiner relies on Chandley for teaching an airfoil having a shield 28 comprising a platinum/rhodium alloy and asserts that it would have been obvious to form the airfoil of Andersen such that the metal sleeve 58 comprised a platinum/rhodium alloy as taught by Chandley. However, even if the metal sleeve 58 were modified to be made of a platinum/rhodium alloy, there is still no teaching in the prior art that the metal sleeve 58 would have a first end adjacent to the leading edge and a second end adjacent to the trailing edge. Nor would there be any teaching that the metal sleeve 58 would be a "high temperature foil" as that term is defined in the present specification. Accordingly, the combination of Andersen and Chandley would not render independent claims 1 and 7 unpatentable. Claims 2, 8 and 9, which depend from claim 1 or 7, are thus also not rendered unpatentable.

The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Andersen in view of Mizuhara. This ground of rejection is respectfully traversed.

The Examiner relies on Mizuhara for teaching a brazing alloy having chromium, palladium and nickel and asserts that it would have been obvious to use such a brazing alloy in Andersen. However, even if Andersen were modified to use the Mizuhara brazing alloy, there is still no teaching in the prior art that the metal sleeve 58 would have a first end adjacent to the leading edge and a second end adjacent to the trailing edge. Nor would there be any teaching that the metal sleeve 58 would be a "high temperature foil" as that term is defined in the present specification. Accordingly, the combination of Andersen and Mizuhara would not render independent claim 1 unpatentable. Claim 4, which depends from claim 1, is thus also not rendered unpatentable.

The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Andersen in view of Mizuhara and further in view of Lee ('102). This ground of rejection is respectfully traversed.

Lee ('102) is cited for a teaching of using a nickel-base superalloy, but does not teach or suggest an outer wall having a first end adjacent to the leading edge and a second end adjacent to the trailing edge. Lee ('102) also does not teach or suggest an outer wall comprising a "high temperature foil" as that term is defined in the present specification. Accordingly, the combination of Andersen and Mizuhara would not render independent claim 1 unpatentable. Claim 4, which depends from claim 1, is thus also not rendered unpatentable.

The Examiner has rejected claims 6 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Andersen in view of Craig et al. This ground of rejection is respectfully traversed.

The Examiner relies on Craig for teaching a turbine blade shell 34 made of a nickel-base alloy and contends that it would have been obvious to form the metal sleeve 58 of Andersen of a nickel-base alloy. However, even if the metal sleeve 58 were modified to be made of a nickel-base alloy, there is still no teaching in the prior art that the metal sleeve 58 would have a first end adjacent to the leading edge and a second end adjacent to the trailing edge. Nor would there be any teaching that the metal sleeve 58 would be a "high temperature foil" as that term is defined in the present specification. Accordingly, the combination of Andersen and Craig would not render independent claims 1 and 7 unpatentable. Claims 6 and 12, which depend from claims 1 and 7, respectively, are thus also not rendered unpatentable.

The Examiner has rejected claims 1, 2, 4 and 5 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 3, 4 and 5, respectively, of U.S. Patent No. 6,551,063. Furthermore, the Examiner has rejected claim 6 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,551,063 in view of Craig. These grounds of rejection are respectfully traversed in light of the present amendment.

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Claim 3 of U.S. Patent No. 6,551,063 recites an airfoil having a pressure side wall and a suction side wall. A slot is disposed the pressure side wall adjacent the trailing edge, and a land is disposed adjacent to the slot. Claim 3 further recites an outer wall, comprising a high temperature foil, attached to the land and covering a portion of the slot. An interface layer is disposed between the outer wall and the land.

As mentioned above, independent claim 1 has been amended to recite that a first end of the outer wall is adjacent to the leading edge of the airfoil and a second end of the outer wall is adjacent to the airfoil trailing edge. No claim of U.S. Patent No. 6,551,063 recites an outer wall having a first end adjacent to the leading edge and a second end adjacent to the airfoil trailing edge, as now required by claim 1, and there is no teaching in the prior art of record of this feature. Accordingly, it is submitted that claim 1 is not unpatentable over U.S. Patent No. 6,551,063. Claims 2 and 4-6 depend from claim 1 and are thus also believed to be patentable over U.S. Patent No. 6,551,063.

Applicant notes with appreciation the indication that claims 10 and 11 would be allowable if rewritten to include all the limitations of the base claim and any intervening claims. However, in view of the above remarks submitting that claim 7 as amended is allowable, it is felt that the rewriting of claims 10 and 11 is not necessary.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the objections and rejections is requested. Allowance of claims 1, 2 and 4-12 at an early date is solicited.

Respectfully submitted,

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Date

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